2020-05-20-B Aries Working Group Call (US afternoon)

Summary:

- Issue Game: Can we close this?
- DIDComm DIF WG Update
- Aries Toolbox Open Discussion
- Websockets for client communication

Note: This call is being recorded.

Date
20 May 2020 (12PM Los Angeles, 3PM New York, Tuesday at 7AM Sydney)

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Attendees

- Sam Curren (Indicio) <sam@indicio.tech>
- Stephen Curran (Cloud Compass Computing Inc.) <swcurran@cloudcompass.ca>
- Robert Mitwicki <robert.mitwicki@humancolossus.org>
- Ed Eykholt (iRespond)
- Steve McCown (Anonyome Labs) <smccown@anonyome.com>
- Drummond Reed (Evernym) <drummond.reed@evernym.com>
- George Aristy (SecureKey) <george.aristy@securekey.com>

Welcome / Introductions

Announcements

Related Meetings Review

- Ursa -
- Semantics - Next meeting: 04/28 (Tuesday)
- DID UX Call - Active?
- SSI in IoT WG
- Indy Contributors - No call this week
- Identity WG / Identity WG Implementer calls (Wed / Thurs) - Mike Lodder ZKP LD
- DIF DIDComm WG - Monday's at Noon US/Pacific - Sam Curren (Mon) - DID Doc services, etc.

Upcoming Releases and Work Updates

- Aries Protocol Test Suite
  - One agent under test
  - Issue, credential, and proof tests are merged.
- Aries Agent Test Harness
  - Test compatibility between any two agents
  - https://github.com/bcgov/aries-agent-test-harness
- Aries Shared:
  - indy-vdr (Andrew Whitehead) https://github.com/hyperledger/indy-vdr
  - Nearing release 0.6(?) - most work complete that was needed: Design doc, FFI, testing, CI / CD
  - CI - GitHub actions runs unit tests and basic integration tests
  - CD not there
  - No design doc, but crate docs
  - Rich Schema merged and behind a feature flag
  - Refactoring PR not merged - cleanup, internal simplification, crate docs
indy-credx - [https://github.com/bcgov/indy-credx](https://github.com/bcgov/indy-credx)
- Experimental ACA-Py branch created that can do credential exchange with indy-credx

indy-shared-rs - [https://github.com/bcgov/indy-shared-rs](https://github.com/bcgov/indy-shared-rs)
- Shared features across indy-vdr and indy-credx
- pack/unpack on Ursa (not libsodium)

aries-credx
  - 6 most common attribute encodings (but not anoncreds 1 attribute encoding)
  - Can make a non-revocable credential and create proofs.

aries Secure Storage initiatives:
- Mike working on documentation and architecture as an Aries RFC (KMS architecture) and Ursa RFC (API)
  - PR is submitted: [https://github.com/hyperledger/aries-rfcs/pull/440](https://github.com/hyperledger/aries-rfcs/pull/440)
- Mike and Cam's work aries-kms-mayaguez - Postgres backend for credential storage
  - Persistence work allows plugging in any database engine.
  - Focus is using an external enclave.
- aries-kms-vostok - indy-wallet capabilities moved to an Aries base
  - Andrew also working on that

Aries-CloudAgent-Python ([bc.gov](https://github.com/bcgov/indy-credx))
- Release 0.5.1 is on PyPi.
- Revocation support added and tested with Streetcred and esatus Mobile Agents; major/minor version handling

Aries-Framework-Go ([Troy](https://github.com/hyperledger/aries-rfcs))
- Implementing the Out-Of-Band protocol
- Implementing issue-credential and present-proof protocols
- Edge agent in work based aries-framework-go using WASM with support for DIDs, VCs and DIDComm support being added

Aries-SDK-Ruby ([Jack](https://github.com/sovrin-foundation/aries-sdk-ruby))
- Added DID/Verkey sign_and_submit to aries_sdk_ruby and published new gem (0.0.8)
- Created aries-rails-docker experiment that support Rails 4 with Indy 1.8.1 on Heroku & Dokku

Aries-Framework-DotNet ([TomiSlav](https://github.com/sovrin-foundation/aries-sdk-ruby))
- Release last week for Aries compatibility with ACAPy and LibVCX (RFC 0094)

Aries-StaticAgent-Python

Aries-Toolbox
- PR for Connections Update
- Converted to a web application by Robert Mitwicki - repo [https://github.com/thclab/aries](https://github.com/thclab/aries)
- Upcoming cleanup items

Aries-SDK-Java

Aries-Framework-JavaScript
- Started regular meetings: Framework JS Meetings
- Current focus is on mediator use case (NodeJS)

Rich Schemas and W3C Verifiable Credentials ([Brent & Ken](https://github.com/hyperledger/aries-kms-applications))
- Some work has been done to support the W3C Verifiable Credentials Data Model specification

Aries-MobileAgent-Xamarin ([Aries MAX](https://github.com/sovrin-foundation/aries-mobileagent-xamarin))
- Evolution of the open source mobile agent (Mattr Global's OSMA)
  - [https://github.com/hyperledger/aries-mobileagent-xamarin](https://github.com/hyperledger/aries-mobileagent-xamarin)

Ursa
- 0.4.0 scheduled for late March
  - Improved hash to curve algorithm
  - Updates to AMCL wrapper
- To replace libsound, need to have a replacement for the anoncrypt / authcrypt sealed box for pack / unpack.
  - Can be done in Ursa with two steps, but might add as a single function call.

### Agenda

- **Intro and project updates (10 min - )**
- **DIF DIDComm WG Update (Sam - 15 min)**
  - [https://hackmd.io/6Lv0HOi1SbqBthtIr9aw?both](https://hackmd.io/6Lv0HOi1SbqBthtIr9aw?both)
- **Aries Toolbox Open Discussion (Sam, Robert, etc. - 30 min)**
- **Websockets for client communication (Robert - 30 min)**
- **Issue Game: Can we close this? (15 min - )**
- **Open Discussion / Next Week Topics / Wrap Up (5 min - )**

### Next Week

- Connectionless Issue (Tomislav)
- Requests?

### Future Topics

- Migrating to new JWE envelope format: [https://github.com/hyperledger/aries-rfcs/issues/478](https://github.com/hyperledger/aries-rfcs/issues/478)
- **DIF Interop Project - Project is proceeding, connect the communities at IIW**
- **DKMS status**
- Credential Fraud: Example how in ACA-Py to verify same link secret across multiple credentials in presentation
- Schema interop - how to reused schema across different networks [Robert Mitwicki](https://github.com/hyperledger/aries-rfcs/pull/440) (RFC in progress)
- Using WebSockets as a way to communicate back to the mobile/desktop wallet (Agent (services or user) as a proxy for communication between service and digital wallet) [Robert Mitwicki](https://github.com/hyperledger/aries-rfcs/pull/440)
- **Formal protocol verification techniques - Presented in the Aries WG A Call - 2020.04.08 call**
Action items

Call Recording

- [https://github.com/johncallahan/needham_shroeder_spin](https://github.com/johncallahan/needham_shroeder_spin) (non-Aries example using SPIN/Promela)
- What's left for DID Exchange protocol?
- Some discussion in: [https://github.com/hyperledger/aries-rfcs/pull/366](https://github.com/hyperledger/aries-rfcs/pull/366)

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